

## Claims

What we claim is:

- 1        1.    A double transdominant fusion gene, comprising:  
2                a *tat* transdominant mutant gene linked to a *rev*  
3        transdominant mutant gene, wherein said double transdominant  
4        fusion gene inhibits expression of HIV.
- 1        2.    The double transdominant fusion gene of claim 1, wherein  
2                codons in the *tat* mutant which code for basic amino acids at  
3                positions 52 to 57 of the Tat protein are replaced with codons  
4                which code for neutral amino acids.
- 1        3.    The fusion gene of claim 2, herein the coding sequence for amino  
2                acids arg, arg, gln, arg, arg and arg is replaced with the coding  
3                sequence for amino acids gly, gly, ala, gly, gly and gly.
- 1        4.    The fusion gene of claim 1, wherein codons of the *rev* mutant  
2                gene which code for amino acids at positions 80 to 82 of the Rev  
3                protein have been deleted.
- 1        5.    The fusion gene of claim 1, wherein the *tat* and *rev*  
2                transdominant mutant genes are linked by a histidine bridge.
- 1        6.    A double transdominant fusion gene, comprising:  
2                a *tat* transdominant mutant gene, wherein codons of said  
3                *tat* mutant gene which code for basic amino acids at positions 52  
4                to 57 of the Tat protein are replaced with codons which code for  
5                neutral amino acids;

6                   a *rev* transdominant mutant gene, wherein the codons of  
7                   the Rev mutant which code for amino acids at positions 80 to 82  
8                   of the *Tat* protein have been deleted; and  
9                   a histidine bridge linking the *tat* transdominant mutant  
10                  gene to the *rev* mutant gene.

1       7.       The transdominant protein produced by the transdominant  
2                  fusion gene of claim 6.

1       8.       A method of treating HIV disease in humans, comprising:  
2                  delivering to the human to be treated a pharmacologically  
3                  effective dose of a double transdominant gene containing a *tat*  
4                  transdominant mutant gene linked to a *rev* transdominant  
5                  mutant gene.